

ABSTRACT OF THE DISCLOSURE

A hard coating film of the present invention is formed on a substrate, and is a multilayer including at least the following layers (1) to (3). (1) A first layer on the substrate side comprising one or more metals selected from the group consisting of elements in Groups 4A, 5A, and 6A of the periodic table; (2) a B- and C-containing surface layer; and (3) a graded composition layer which is formed in a sandwiched manner between the first layer and the surface layer, and in which the content of B and C changes continuously or stepwise from the first layer side toward the surface layer side. Another hard coating film of the present invention has a cubic boron nitride film as its outermost surface layer; the cubic boron nitride film is stacked in a state of having been nucleated from a B- and N-containing layer; and the B- and N-containing layer has a ratio of N to B of 0.8 to 1 on a mole basis in at least the nucleation portion, and contains one or more elements selected from the group consisting of elements in Groups 4A, 5A, and 6A of the periodic table, and Si in a proportion of 0.02 to 0.1 on a mole basis. Such a configuration provides a hard coating film capable of being formed with good adhesion on the substrate surface of a cemented carbide, a high-speed steel, or the like.